ABSTRACT OF THE DISCLOSURE

Provided are a router and a method of controlling a maximum transmission unit (MTU) of an external network interface. The router controls the MTU by disassembling packet data segments of a predetermined size and assembling the data segments of the predetermined size into the original packet data structure when the external network interface physically included in a linecard processor has an MTU that is greater than that of an internal data communication channel of the router, so that the external network interface can transmit and receive data with another router without being affected by the MTU of the internal data communication channel in the operating system of the router.